

**The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:**

**Document Title:        Illicit Drug Use Among Detained Arrestees: The International Arrestee Drug Abuse Monitoring Program**

**Author(s):                Bruce Taylor Ph.D.**

**Document No.:         189613**

**Date Received:         August 9, 2001**

**Award Number:         98-IJ-CX-0047**

**This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.**

**Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.**

189613

Illicit drug use among detained arrestees:  
The International Arrestee Drug Abuse Monitoring Program

PROPERTY OF  
National Criminal Justice Reference Service (NCJRS)  
Box 6000  
Rockville, MD 20849-6000

Paper presented at the

Seminarios Internacionales Complutenses:

Antisocial behavior, violence and drugs in the school

Madrid, Spain

Oct 4, 1999

by

Bruce Taylor, Ph.D.\*

- U.S. Department of Justice, National Institute of Justice, 810 Seventh Street, NW, Washington, DC 20531

C:\ADAMI\_ADAM\Spain\paper submitted for publication on I-ADAM.wpd

Introduction

Nations are increasingly recognizing a shared interest in better understanding the causes of crime and drug problems. The problems of drug use and crime are increasingly becoming global phenomena (United Nations International Drug Control Programme, 1997: 70 - 120). No longer can these problems be thought of in isolation or strictly in national terms. The drug trade affects most nations of the world and the problems arising in these countries because of drugs can be quite severe. Problems related to the abuse of drugs can be found in both developing and industrialized countries, including: Crime, sexually-transmitted diseases, accidents, deaths, poverty, unemployment, lowered productivity and many other problems (United Nations International Drug Control Programme, 1995). Illicit drugs can be devastating not only at the individual-level, but they can undermine international relations and corrupt governments. Despite the growing nature and globalization of the drug problem, the quality and extent of the research on this subject has not proportionately grown. Most of the research in this area has been done independently by dozens of countries using different methodologies. Unfortunately, the results of this research are not comparable across countries.

About two years ago, in response to this dearth of international comparative drug research, the National Institute of Justice (NIJ), a component of the U.S. Department of Justice, started the International Arrestee Drug Abuse Monitoring (I-ADAM) Program. I-ADAM has been designed to provide an international research platform to study the relationship between drugs, crime and other social problems. By identifying invariant factors that predict drug use across countries, I-ADAM will broaden the research community's understanding of the nature of the drug epidemic. More importantly, I-ADAM will provide a data-driven framework for informing and coordinating global drug control policy. Many policy recommendations that are made regarding global drug control policy are made without the benefit of research. A fundamental element to designing and planning effective drug control strategies is the presence of extensive and reliable data, which is very often not available in many countries around the world. I-ADAM will meet the needs of policy makers by providing a base from which data-driven policy recommendations can be generated. I-ADAM data should make it easier for drug control policies to be coordinated across nations, and improved coordination of drug-control policies could improve the international communities ability to combat the pernicious effects of the global drug trade.

One of the main barriers to drug policy research has been funding. Most countries don't have the resources to collect data which is representative of their entire population. However, I-ADAM is an established monitoring system for focusing on the areas of a nation where the drug problem is worst (the largest cities) and with the people using the most drugs (arrestees). Also, I-ADAM can provide prevalence estimates for low base rate drugs not typically used in the general population (e.g., heroin and cocaine). Finally, the drug use patterns of arrestees are often a good indication of future problems. For example, the United States ADAM program documented high prevalence rates for cocaine long before the epidemic hit the general population (Reardon, 1993).

#### Summary of the History of NIJ's research projects on arrestee urinalysis testing

- 1984 - Arrestee feasibility/pilot studies in Washington, DC and New York.
- 1986 - NY follow-up study shows a two-fold increase in cocaine use (since 1984 study).
- 1987 - Drug Use Forecasting (DUF) program starts in 8 U.S. cities.
- 1989 - DUF expanded to 14 more U.S. cities.
- 1996 - England begins 5 city ADAM (Arrestee Drug Abuse Monitoring)-like study.
- Chile begins 2 city ADAM-like study
- 1997 - DUF program re-launched as ADAM
- NIJ Director presentation at UN/PNI meeting in Italy and discusses I-ADAM
- ADAM Director addresses OAS to promote I-ADAM in Latin America.
- 1998 - Australia secures funding for DUMA (March).
- First Strategic I-ADAM Meeting (April)
- Preliminary USA/English results presented at NIJ's Annual Conference (July)
- I-ADAM survey instrument/training program is developed (July)
- NEW-ADAM in England enters its 2nd stage of development (July)
- The Netherlands conducts a feasibility study (August)
- Chile and Scotland secure funds (August)
- Visits by NIJ to Scotland and England (Sept.), Australia (Oct.), and Chile (Dec.)
- South Africa secure funds for I-ADAM work (Nov.)
- 1999 - Australia & Chile start 1st data collection (Jan.)
- Second Strategic I-ADAM Meeting in Chicago (April)
- The Netherlands, Scotland, and South Africa start collecting data (June - August)
- Meeting of U.S. officials on the expansion of I-ADAM to other countries (Nov.)

### History of DUF/ADAM

In 1984 NIJ funded arrestee pilot studies in Washington, DC and Manhattan (New York) to assess the utility of pretrial drug testing and the feasibility and effectiveness of assessing pretrial risk. Together these two projects involved data collection with 14,000 arrestees (Wish, E.D., 1987). Both studies revealed drug positives, according to urinalysis, for more than half of the tested arrestees (Toborg and Kirby, 1984; Wish, E.D., 1987). This was a level far higher than suggested by other estimates at that time in 1984 (Reardon, 1993). The results from this pilot work also challenged the validity of self-reported information on drug use and confirmed the usefulness of drug testing for the arrestee population. This pilot work revealed that more than half of the arrestees who tested positive for illicit drug use by urinalysis failed to admit using drugs during a face-to-face research interview (Carver, 1986). NIJ funded a follow-up study in Manhattan in 1986 and this study revealed the problem of cocaine use was rising rapidly, double the number of people tested positive for cocaine in 1986 (83%) as compared to 1984 (42%) (Wish, E.D., 1987). Had self-reports been relied on exclusively, this increase might never have been detected, for the proportion who admitted to ever having used cocaine was about the same in the two years (Wish, E.D., 1987). The high levels of cocaine use detected in these two pilot

cities and the steep increase in use over a fairly short period of time (1984 to 1986) raised the question of whether the trend might be an anomaly of these two large east coast cities. To gauge drug use among arrestees in other urban areas, NIJ created the Drug Use Forecasting (DUF) program in 1987.

DUF served as one of the U.S. government's primary sources of information on drug use in cities among arrestees, and one of the primary research tools on drug use, crime, and related social indicators (Reardon, 1993). The original group of sites in 1987 included twelve cities. In 1989 the number of DUF sites was expanded to a total 22 sites. In 1997, the DUF program was redesigned and renamed ADAM (Arrestee Drug Abuse Monitoring) to reflect the geographic expansion of the program, increased methodological rigor, its development as both a research and policy platform, and as a system for locally initiated research on topics identified by sites. At its core, however, the ADAM program preserves DUF's simple concept: Interviewing and drug testing of arrestees.

### History of I-ADAM

With the transition from DUF to ADAM the I-ADAM program was more formally seen as a goal for the ADAM program to work towards. Prior to the more formal launching of the I-ADAM program two countries started collecting ADAM-like data. In 1996, the first non-U.S. sites started to collect ADAM like data (Chile and England). The first formal unveiling of the I-ADAM project occurred in 1997 when the Director of NIJ (Jeremy Travis) addressed the United Nations Program Network Institute members. The United Nations Program Network Institute is a fourteen member world-wide network of the United Nations Crime Prevention and Criminal Justice Programme Division. Also, in 1997 the Director of the ADAM Program (Jack Riley) addressed the members of the Organization of American States at one of their annual meetings. I-ADAM held its first strategic planning meeting in Miami in April 1998 with representatives from eight nations (Australia, Chile, England, Netherlands, Panama, Scotland, South Africa, Uruguay), two international organizations (OAS, UNDCP), experts in the field of drug surveillance systems, NIJ staff, and other U.S. Federal representatives (DEA, NIAAA). Preliminary results of the first I-ADAM data analysis project comparing arrestee drug use rates in England and the U.S. were presented at NIJ's Research and Evaluation Conference in July 1998. (Taylor and Bennett, 1998). In July 1998, officials from England's Home Office announced the second phase of development for the New England and Wales ADAM program (named NEW-ADAM). The second phase of NEW-ADAM saw the addition of several new sites and the beginning of a time series design in the revisited sites. The second wave of NEW-ADAM data collection began in August 1998. Towards the end of 1998, NIJ started conducting field assessments at the international sites (Scotland and England in September 1998, Australia in October 1998, Chile in December 1998, and South Africa in January 1999) and began training interviewer staff in Australia (January 1999) and Chile (January 1999). Between the end of 1998 and the first few months of 1999, all six of the I-ADAM participating countries/jurisdictions were able to secure funding for I-ADAM data collection (Australia, Chile,

England, Netherlands, Scotland, and South Africa), and three of them (Australia, Chile, and England) began ongoing data collection programs. In April 1999, NIJ released the publication, *Comparing drug use rates of detained arrestees in the United States and England* (Taylor and Bennett, 1999). This report represents the first comparative analysis of arrestee drug use rates across two countries and the first publication of the I-ADAM program. I-ADAM held its second strategic planning meeting in Chicago in April 1999. In addition to the attendees from the first meeting, this meeting included representatives from Malaysia and Taiwan. In the middle of 1999 three more sites started collecting data (Netherlands, Scotland, and South Africa).

### Description of I-ADAM program

The International Arrestee Drug Abuse Monitoring (I-ADAM) program is an international partnership of government-sponsored research organizations. All of the participating countries/jurisdictions are self-funded and are being operated through local/national funds. The main feature of I-ADAM is that it is a standardized international drug surveillance system designed to provide researchers a platform to compare the prevalence of drug use among arrestees in different nations, and allow researchers to assess the consequences of drug abuse within and across national boundaries. I-ADAM has three main components:

1. *Voluntary, anonymous and confidential interviewing.* At each I-ADAM data collection site, trained interviewers (who are not in law enforcement) conduct individual interviews with booked arrestees, and collect voluntary and anonymous urine specimens from each of them. Each I-ADAM site provides a private or semi-private interview environment which is conducive to open, valid and reliable responses by participants.
2. *Similar data collection methods.* Each I-ADAM site uses similar eligibility criteria for selecting study participants. Each I-ADAM site collects data from adult male and adult female booked arrestees detained long enough to be interviewed (but less than 48 hours). Data collection from juvenile males and juvenile females is optional. Each I-ADAM site has been instructed to obtain a sample size large enough to provide a reasonable level of statistical precision where all the main age and gender groups are represented in sufficient numbers. Typically, each I-ADAM site schedules about two to three weeks of quarterly interviewing at the jail/lock-up. The sampling targets are for 150 adult male and 75 adult female arrestees each quarter to reach a total of 900 arrestees annually. Each I-ADAM site aims to use a definable study/catchment area and have an understanding of the representativeness of their data. Ultimately, probability-based sampling methods will be adopted at each I-ADAM site.
3. *Standardized measures.* International sites, in collaboration with NIJ, will determine which drugs to test for and how many drugs to include in the drug test panel. Currently, at least five common drugs are being tested by all the I-ADAM sites (marijuana, cocaine, heroin/opiates,

amphetamines and benzodiazepines). Also, NIJ has developed a core I-ADAM survey instrument, in consultation with the other I-ADAM sites, and the agreed upon core survey is being implemented by all the active I-ADAM sites. At a later point, common addenda surveys will be developed for special topical areas (e.g., domestic violence).

### Rationale for program

1. *I-ADAM addresses the problem of the absence of comparable international drug data.* I-ADAM's development is important because the existing drug surveillance systems across the globe are in many cases not compatible. Therefore, post-hoc comparisons across countries (with independently designed systems) are very difficult. The existing general population household surveys (found in some countries) are using very different measures of drug use and these surveys were not designed for multinational comparisons. I-ADAM is being designed from its inception to be a standardized international surveillance system (similar instruments, sampling, training, and other protocols). Without valid and reliable data it is very difficult to plan and design effective strategies to combat problems. I-ADAM can be a source for accurate data about the arrestee drug abuse problem. Comparable international drug data is an important goal and will make it easier for the nations of the world to coordinate their drug control policies.

2. *I-ADAM provides a standard basis for nations to coordinate drug control policies and improve multi-lateral cooperation.* A growing substance abuse problem in a country's arrestee population can help forecast a potential hot-spot for international drug-trafficking. Through development of addenda, I-ADAM can be used to estimate world-wide drug prices and drug-market characteristics that may be useful for coordinating international drug control efforts. Through improved coordination of drug-control policies, the world will be in a better position to combat the global drug trade.

3. *I-ADAM can be used to evaluate criminal justice interventions in a cost-effective manner.* I-ADAM data can be used as an excellent source of pre/post intervention data. For example, the effectiveness of drug enforcement strategies on drug purchasing patterns can be assessed by looking at drug market interview data from arrestees before and after the intervention. Also, rigorous experimental evaluations can be integrated into the basic ADAM platform. The U.S. Government spends enormous sums of money overseas on a variety of criminal justice-based interventions. However, there is not much research being conducted to assess the effectiveness of these interventions and whether tax dollars are being spent wisely. I-ADAM could serve as an efficient, low-cost evaluation system for these and other non-U.S. interventions.

4. *I-ADAM is a low-cost and efficient system for estimating drug use.* One of the main barriers to international drug policy research has been funding. Many countries do not have the resources to collect data which is representative of their entire population. However, I-ADAM is an established monitoring system for focusing on the areas of a nation where the

drug problem is worst (the largest cities) and with the people using the most drugs (arrestees). Also, I-ADAM can provide prevalence estimates for low base rate drugs not typically used in the general population nor detected in household surveys (e.g., heroin/cocaine).

5. *I-ADAM can advance our understanding of the relationship between drugs and crime.* I-ADAM can provide an international dataset to help identify invariant factors that explain the relationship between drugs, crime, and other social problems across countries/jurisdictions.

#### Goals for the I-ADAM program:

1. *Provide a data-driven framework for informing and coordinating global drug control policy.* Many policy recommendations that are made regarding global drug control policy are made without the benefit of research. I-ADAM will meet the needs of policy makers by providing a base from which data-driven policy recommendations can be generated. Specific policy questions can be brought before the I-ADAM group and reports can be generated in formats suitable for policy makers. For example, law enforcement officials may have questions about the trafficking of a popular new drug across nations. I-ADAM testing procedures could be modified to capture the prevalence of consumption of this new drug among arrestees and the arrestees' knowledge of the drug market for this new drug.

2. *Advance the body of knowledge that exists on the relationship between drugs, crime and other social problems.* Despite the growing nature and globalization of the drug problem, the quality and extent of the research on this subject has not proportionately grown. Most of the research done in this area has been done at the national-level. Even if researchers wanted to do an international comparative analysis, the existing national systems are in many cases not compatible. I-ADAM will fill this void by providing an international research platform to study the relationship between drugs, crime and other social problems. By identifying invariant factors that predict drug use across countries, I-ADAM will broaden the research community's understanding of the nature of the drug epidemic. This type of research might show, for example, that certain market conditions must exist for the drug epidemic to thrive. The findings could then be used by countries not experiencing the epidemic to plan for prevention to avert the problem altogether. For such research to proceed requires that I-ADAM receive financial and political support from a variety of international organizations, governmental sources, and the business/private sector.

#### Short-term objectives for the I-ADAM program:



1. *To set an agenda that is of interest to a broad group of researchers and policy makers.* Over the last year the concept of I-ADAM has been successfully tested in a variety of countries and a standardized measurement system was established. The next step is to assess what are the most important research and policy questions that I-ADAM should address. There are a number of important drug policy questions that I-ADAM can address. However, it is important that these questions are prioritized and that I-ADAM has a clear agenda. Once there is an agreed upon set of focus questions an assessment can be made of where I-ADAM data should be collected.
2. *To select and recruit jurisdictions or countries that are important data points to answer I-ADAM's policy and research questions.* Jurisdictions will be recruited based on their importance in providing key data points to answer I-ADAM's policy and research questions. One research question could involve the testing of a particular theory about drugs and crime. For example, to properly test a theory about how drug markets operate might require data from countries with varying levels of violence. Countries would also be targeted based on policy needs. In attempting to inform international drug control policy, data might be desired from certain drug source countries and/or certain drug consuming countries.
3. *To collect I-ADAM data following a set of agreed upon standardized guidelines.* The lessons learned from the past year of I-ADAM data collection will become more formalized and a more extensive monitoring system will be put in place to assure similar methodology across sites. A commitment will have to be made by all the participating sites to a formal set of rules, and an ongoing-monitoring system for quality control will need to be instituted.
4. *To analyze existing I-ADAM data and disseminate the results in an appropriate format to a targeted group of researchers and policy makers.* The importance of I-ADAM will ultimately be judged by how useful its results are for answering pressing policy questions and advancing the field of drug abuse research. To be useful to policy persons, I-ADAM results need to be reported in a timely-fashion and in a concise format. One of our immediate goals is to assemble the current data analytic results from our existing I-ADAM participating jurisdictions into a government publication and disseminate the results to a targeted group of researchers and policy makers.

#### Lessons learnt from ADAM

For more than a decade the DUF/ADAM program has shown that the majority of detained arrestees test positive for recent drug use within 48 hours of their arrest. Interestingly, while in the general United States population drug use started to go down dramatically in the mid to late 1980s, we did not see similar sharp decrease in drug use among criminal offenders, including arrestees. In fact the rates seemed to rise. For example, in Washington, D.C., the first DUF site, the percentage of arrestees testing positive for any drug (mostly cocaine) rose from 55 percent in 1984 to nearly 75 percent in 1989. However, through the 1990's, the rates of detected cocaine use among arrestees stabilized. By 1997, the rates of arrestees who tested positive for

any drug were below their highest levels, although cocaine use remained high.

Aside from playing a key role in tracking hardcore drug use (such as cocaine, heroin and more recently methamphetamine), the ADAM program has also provided strong evidence that drug use is subject to powerful cohort effects. For example, cocaine use has gone down for the most recent birth cohort of arrestees (born in the 1970s sometimes referred to as the blunts generation) but has remained at high levels for older cohorts born in the 1950s and 1960s. ADAM's trend data show that cocaine-using offenders are getting older. The percent of 18- to 20-year-old arrestees who tested positive for cocaine in Los Angeles, for example, dropped from 47 percent in 1988 to 24 percent by 1996. However, there has not been a corresponding decrease in cocaine use by older cohorts (age 30 and over). ADAM data have been very useful for getting drug policymakers to acknowledge this "aging in" and "aging out" process.

The ADAM program has also been very useful for demonstrating the regional variation of the drug problem in the United States. For example, methamphetamine use continues to be seen primarily in Western U.S. cities (In 1998, the methamphetamine urinalysis positive rate for San Diego was over 30%, Sacramento about 25% , San Jose about 20%, Portland about 20%, Los Angeles about 10%). There is hardly any methamphetamine use among the east coast ADAM sites. However, cocaine is a major problem in these east coast sites(in 1998, the cocaine urinalysis positive rate was over 50% for New York City, Atlanta, Philadelphia, and Ft. Lauderdale).

The ADAM program has also been very useful in identifying the prevalence of drug use within a hardcore population of youths. Thirteen ADAM sites also collect data from juveniles (Birmingham, Cleveland, Denver, Indianapolis, Los Angeles, Phoenix, Portland, St. Louis, San Antonio, San Diego, San Jose, Tucson, Washington, D.C.). Over the years, DUF/ADAM have found that the ADAM sample of youths are generally more likely to use "harder" drugs (e.g., cocaine) than kids found in high school samples from the Monitoring the Future Study (supported by the National Institute of Drug Abuse). In examining the thirteen ADAM juvenile data collection sites for 1998, the average juvenile marijuana use rate (according to urinalysis) was about 51%, which is higher than the average marijuana use rate for adults (35%). However, the 1998 urinalysis results show that cocaine use among the ADAM juvenile sample is lower (10%) than the ADAM adult sample (37%), amphetamine use is lower (juvenile 4%) than the ADAM adult sample (7%), opiate use is lower (juvenile 1%) than the ADAM adult sample (9%), and "any" drug use is lower (juvenile 55%) than the ADAM adult sample (66%).

### I-ADAM Results

At this point, published results on the I-ADAM Program only exist for the U.S. and England. By mid 2000 the results for the other I-ADAM participating countries should be

available. At the time of the first I-ADAM conference in 1998, one of the participating countries, England, had already established a pilot program of drug testing detained arrestees and had published its first set of results (Bennett, 1998). The generation of this English dataset of drug use among detained arrestees, which was based on procedures similar to those of the ADAM program, presented an early opportunity to compare drug use by this group in the United States with that in another country.

The analysis presented in the report, *Comparing drug use rates of detained arrestees in the United States and England* (Taylor and Bennett, 1999), compares the findings from surveys of arrestees detained in five locations in England with those from similar surveys conducted in five matched locations in the United States. The data were adjusted and weighted in various ways to make the two samples for both countries as similar as possible. After excluding nonmatched cases, the final dataset consisted of 4,470 in the United States and 839 in England.

Comparison of the two countries reveals that the use of opiates/heroin, methadone, and amphetamines tends to be higher among detained arrestees in England than in the United States. For benzodiazepines and marijuana, comparison reveals no real difference between the two countries. Only for cocaine/crack was use significantly higher in the United States. The study also revealed a number of notable correlations between drug use and various demographic and related characteristics. For several of these characteristics, the subgroups with the highest drug use rates are the same in both countries. Injection as a method of administering drugs is moderately high in both countries, with some distinct differences between the two countries in preference of administration for specific drugs. Few differences between the two were found in the extent to which arrestees received drug treatment or their reported need for it. There was also little difference in age of initiation of drug use (although there were some differences when it came to specific drug types). The findings on legal and illegal income indicate that detained arrestees in England tend to spend more on drugs and to report higher levels of illegal income than their counterparts in the United States.

## References

- Bennett, T.H. (1998). *Drugs and Crime: The Results of Research on Drug Testing and Interviewing Arrestees*, Home Office Research Study No. 183, London: Home Office.
- Carver, J. (1986). *Drugs and crime: Controlling use and reducing risk through testing*. *NIJ Reports*, 199. Washington, DC: Government Printing Office.
- Reardon, J.A. (1993). *The Drug Use Forecasting Program: Measuring drug use in a "hidden" population*. National Institute of Justice Research Report Series. NCJ-144784 Washington, DC: Government Printing Office.
- Taylor, B.G. & Bennett, T. (1999). *Comparing drug use rates of arrestees in the United States and England*. National Institute of Justice Research Report Series. NCJ-175052 Washington, DC: Government Printing Office.
- Taylor, B.G. and Bennett, T. (1998). *The International Arrestee Drug Abuse Monitoring Program: Comparisons between English and U.S. data*. Paper presented at the NIJ Annual Conference on Criminal Justice Research and Evaluation, Washington, DC.
- Toborg, M.A. and Kirby, M.P. (1984). *Drug use and pretrial crime in the District of Columbia*. National Institute of Justice *Research in Brief*. Washington, DC: Government Printing Office.
- United Nations International Drug Control Programme (1997). *World Drug Report*. Oxford University Press: Oxford, England.
- United Nations International Drug Control Programme (1995). *The social impact of drug abuse*. A position paper for the World Summit for Social Development, Copenhagen.
- Wish, E.D. (1987). *Drug Use Forecasting: New York 1984 to 1986*. National Institute of Justice *Research in Action*. Washington, DC: Government Printing Office.

**From:** Bruce Taylor  
**To:** Fort, James  
**Date:** Tue, Jul 17, 2001 3:07 PM  
**Subject:** Re: Conducta antisocial, violencia y drogas en la escuela

I do not speak Spanish. I have what I wrote in English, but they re-wrote some of it. Therefore, if I gave you what I wrote in English it would not be an exact translation of the Spanish document. In any event, attached is what I wrote in English.

I was not aware that Dr. Rodriguez had something published in these conference proceedings. He did not attend the conference. I have no information on Orlando and I am not in a position to assist with the translation of his article.

>>> James Fort 07/12/01 11:01AM >>>  
Good Morning,

In reference to this document that has been submitted to NCJRS, can either of you assist in providing abstracts in English? We would like to obtain English-language abstracts for at least the articles by Dr.'s Rodriguez and Taylor, as well as an abstract describing the whole volume.

Thank you so much for your time.

James Fort  
ORIC/NCJRS

**CC:** Feucht, Thomas

PROPERTY OF  
National Criminal Justice Reference Service (NCJRS)  
Box 6000  
Rockville, MD 20849-6000